Data and Knowledge Management in SAP

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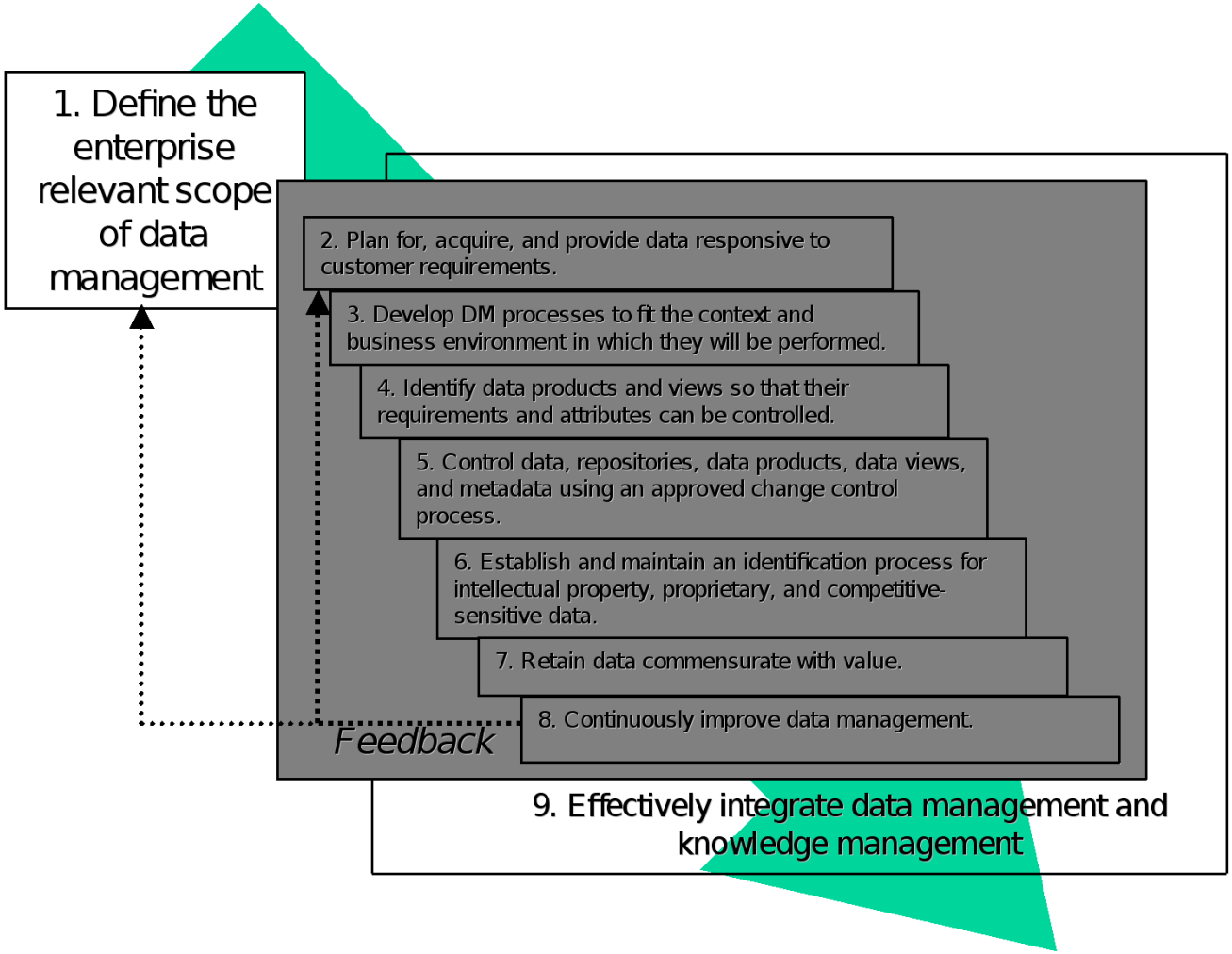
SAP America

Nine Data Management Principles of GEIA 859



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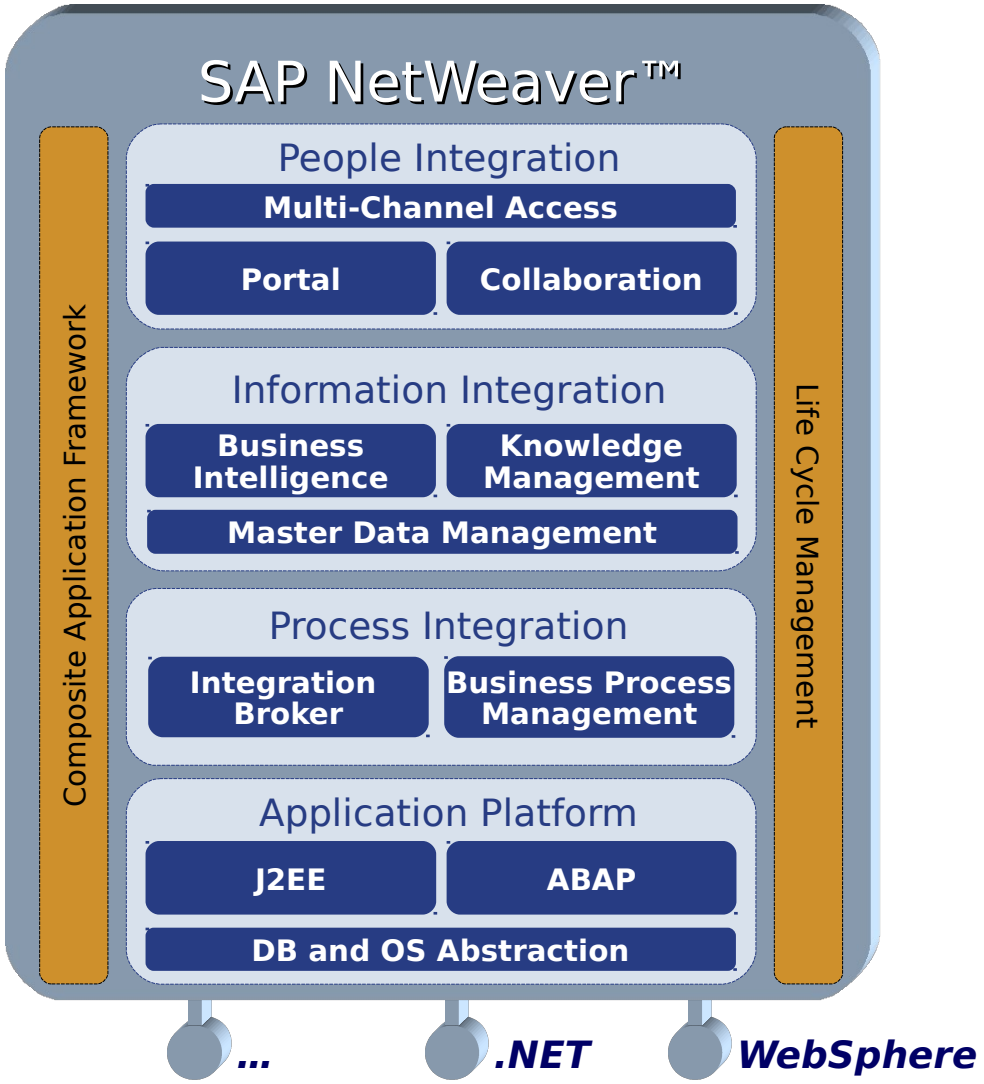

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SAP MDM Business Vision

SAP Master Data Management (SAP MDM) creates a cohesive environment that drives data integration to support business processes in a dynamic and heterogeneous system environment

SAP MDM fosters collaboration by ensuring cross system data consistency – regardless of vendor and physical system location

SAP MDM regards consistent data as the key building block for end-to-end business processes to positively affect process execution, costs-of-business, and total cost-of-ownership for business-class IT systems

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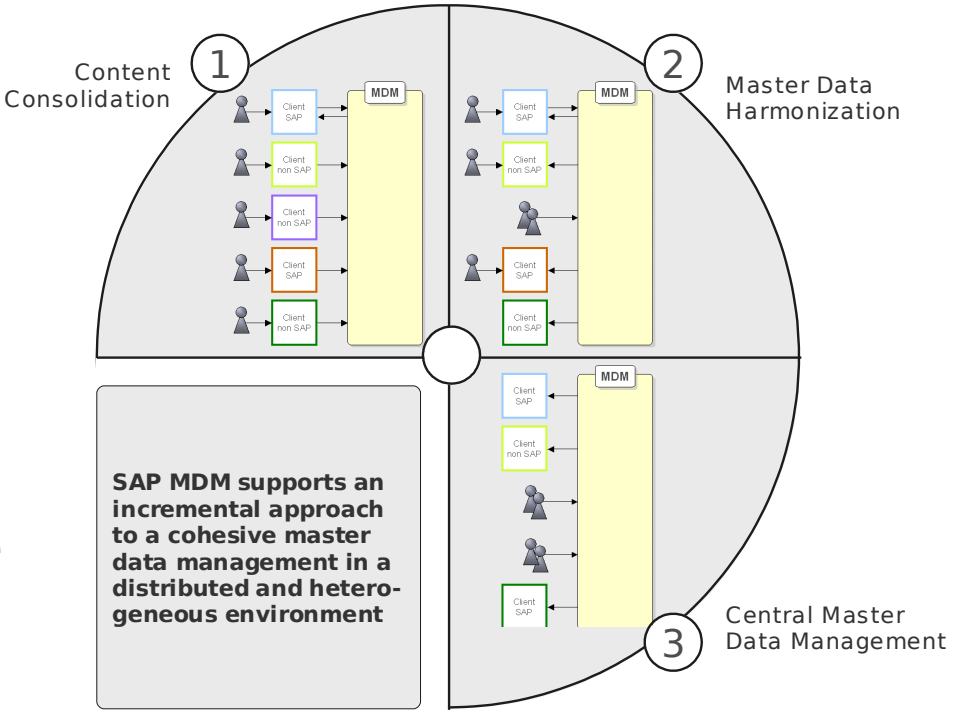
SAP MDM enables information integrity across the business network

- **Define business network environment based on generic and industry specific business elements and related attributes – called master data**
- **Services support to consolidate content, harmonize and manage master data**
- **MDM is vital part of SAP NetWeaver**



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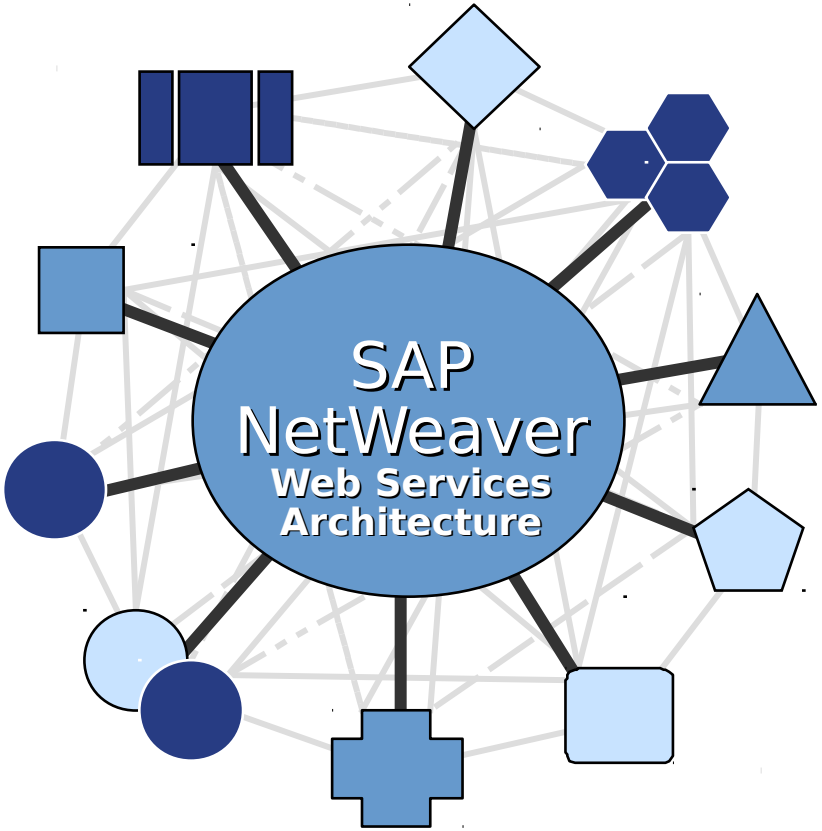
SAP MDM Optimized Landscape

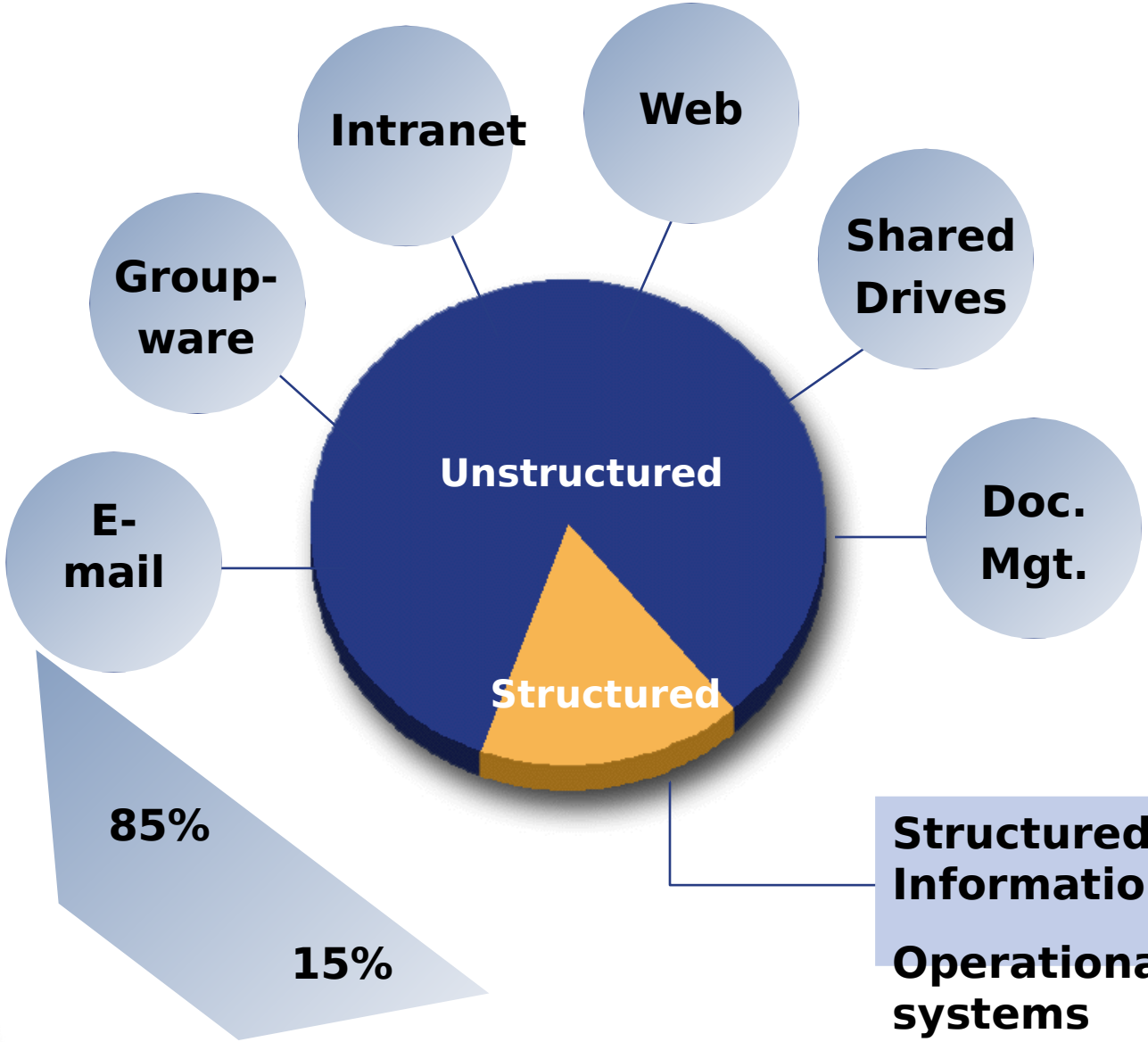


Shared master data
- Harmonized
- Extendible
- One-stop data maintenance

Aligned master data knowledge
- Central master data repository
- Duplicate recognition
- Synchronized analytics

Federated processes
- Accelerated process flow
- Open for localization
- Controlled replication

Unstructured Data – Has It's Particular Challenges



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Integrated Knowledge Management Platform

“It is impossible to centralize all the information in a single repository …“

mySAP Enterprise Portals KM provides

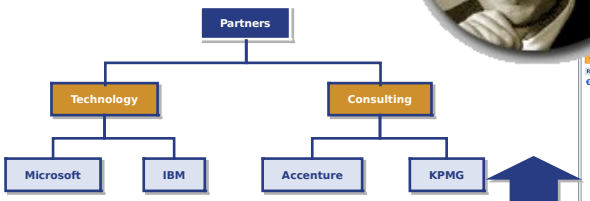
- **a unified view, taxonomies and set of common services**
- **on top of heterogenous repositories of unstructured information**

mySAP Enterprise Portal KM consists of

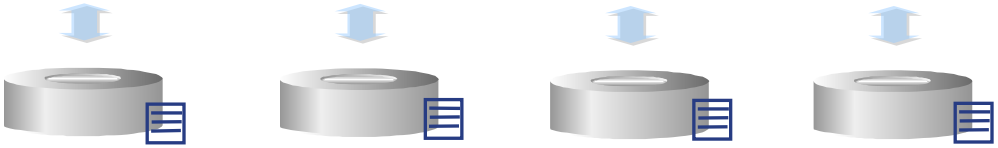
- **Content Management**
- **Search & Classification**

Collaboration for mySAP EP consists of

- **Collaboration Room**
- **Real-time collaboration**



Knowledge Management platform
(Services around information)



Repository Managers as of today (more to come):

- **Windows File Server**
- **WebDAV compliant servers**
- **Lotus Notes**
- **Web Servers (HTTP)**
- **Internal KM repository (CM Store)**

various repositories do exist !
file servers, web servers .....

Status: Q4 2002

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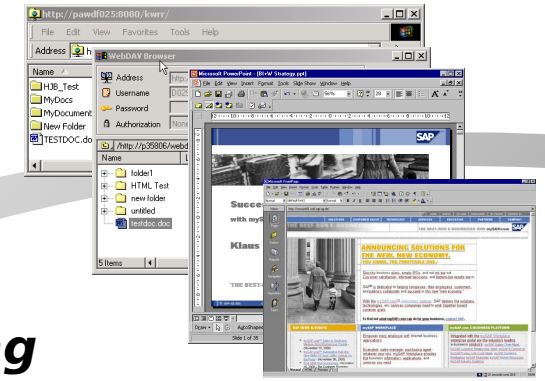
Knowledge Management – Information Loop

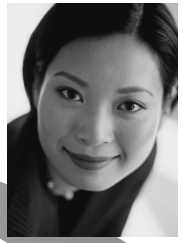
Author



- ***Authoring***
- ***Publishing***
- ***Workflow***

- ***Mail, Annotations***
- ***Feedback, Rating***
- ***Discussion***
- ***Chat, App. Sharing****

Consumer



- ***Navigation***
- ***Retrieval***
- ***Subscription***
- ***Pro***

Enterprise Portal
(Places, Communities)

- ***Taxonomies***
- ***Versioning***
- ***Access Control***
- ***Classification***

Content Manager

Web & Other Content Sources

Crawlers

Connectors
(‘Repository Managers’)

* As part of Collaboration for mySAP EP

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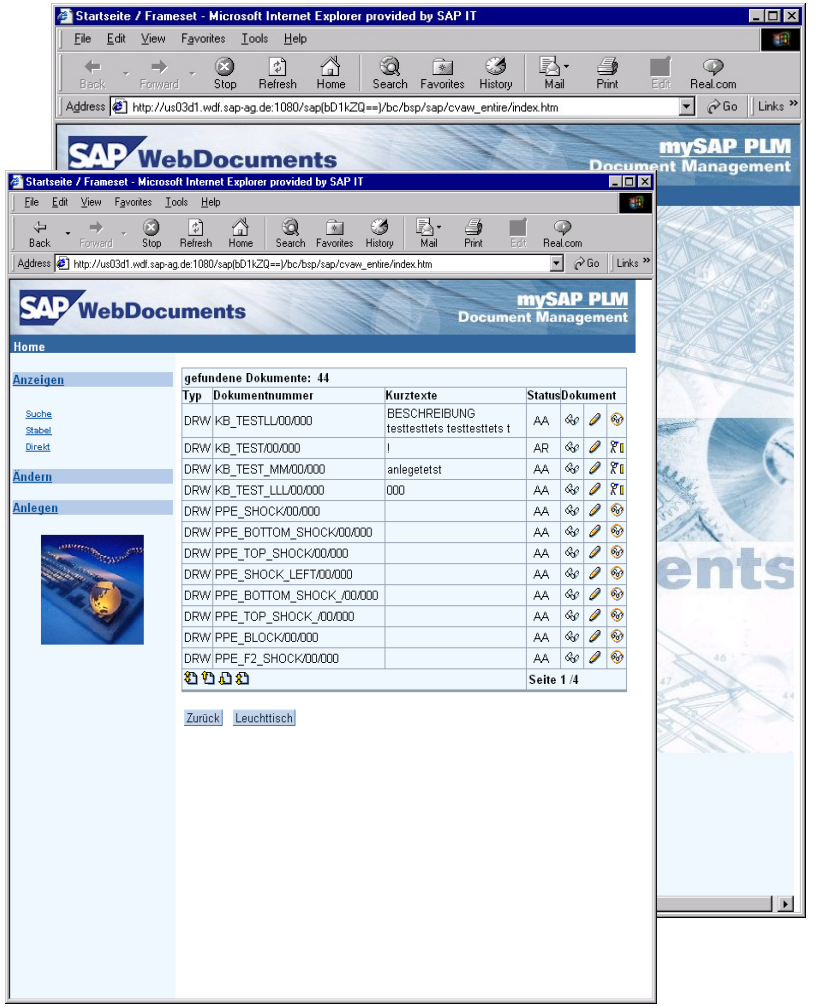
The document management solution for R&D and logistics

- **Comprehensive solution**
  - Versions and structures
  - Appoval and change management
  - Workflow
  - Distribution
  - Web access
- **Process integration**
  - Product structures
  - Project management
  - Logistics
- **Open interfaces**
  - CAD applications
  - Office applications
  - Archiving
  - Document input / output systems



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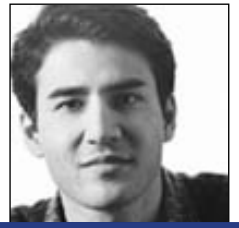
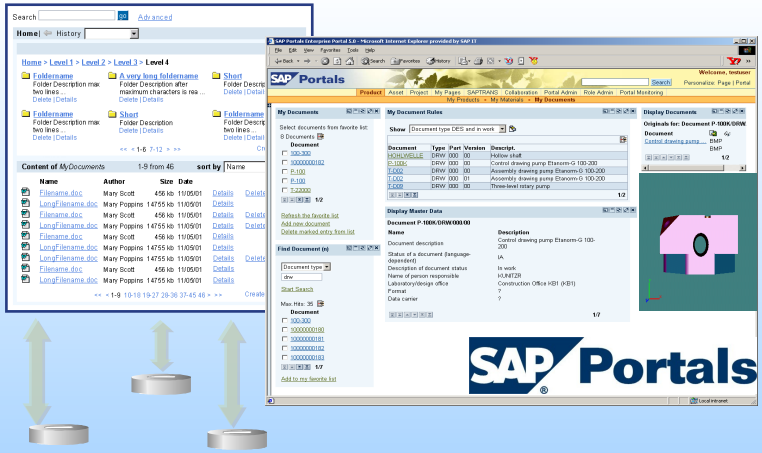
Document-Based Collaboration

Customer

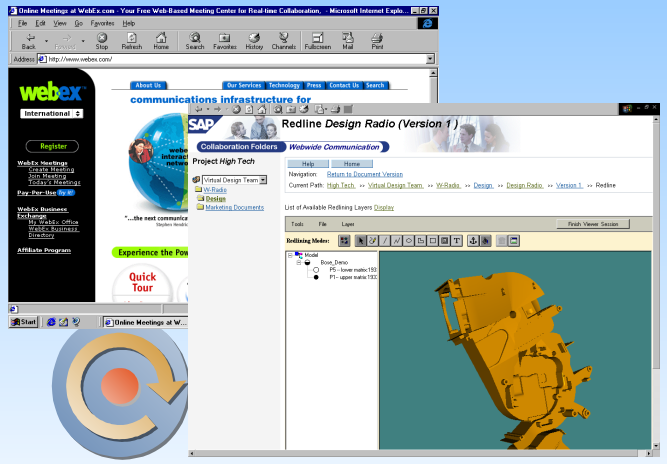


OEM

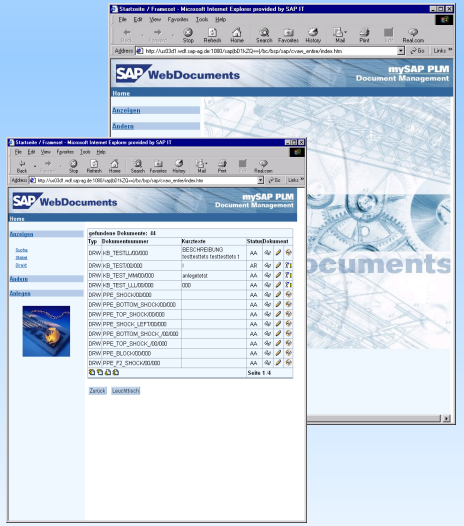
Supplier



Enterprise portal



Collaboration folders



mySAP PLM / document management

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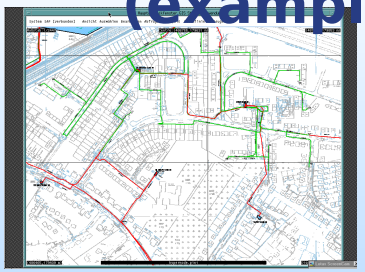
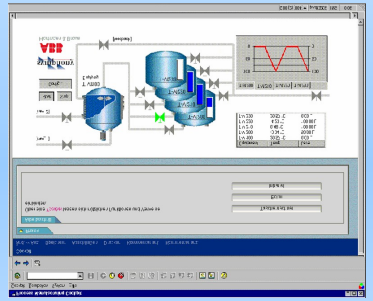
Document Management Integration

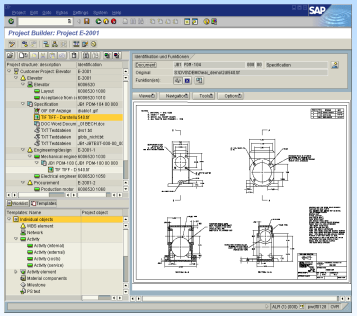
Applications (examples)



Asset life-cycle management



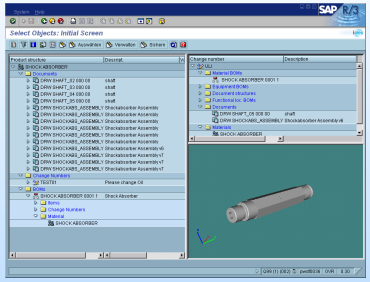
EH&S



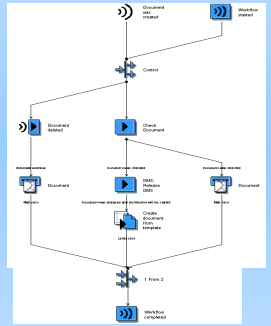
Project management

Document management

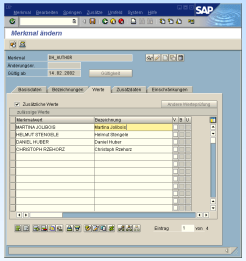
Services



Eng. change management



Workflow



Classification

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WebDocuments

Based on Web application server

Central functions:

- **Create**
- **Change**
- **Display**
- **Search, e.g. full-text retri**

(TREX can be used)

- **Thumbnails**

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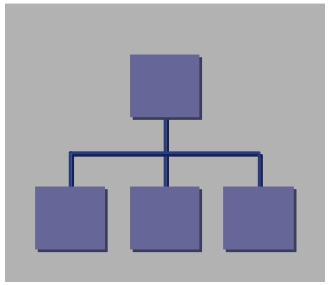
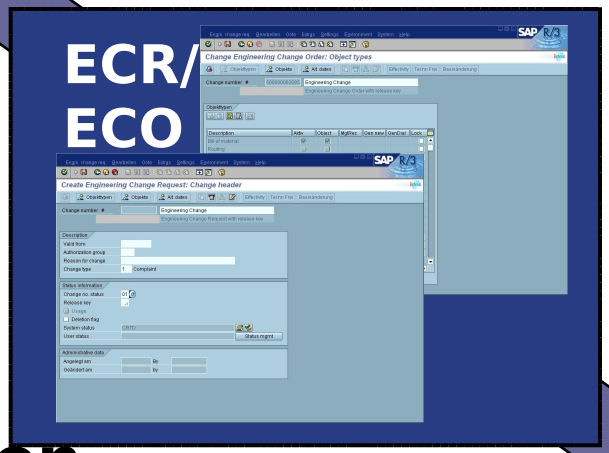
Status before change



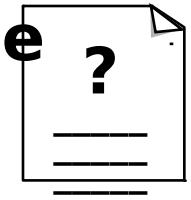
- Release control
- Effectivity

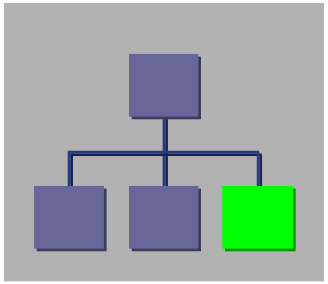
ECR/ ECO



parameters

Documentation of change





Status after change

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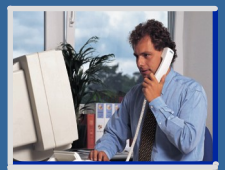
Processing a Change Request / Change Order (ECR/ECO)



Purchasing

Service

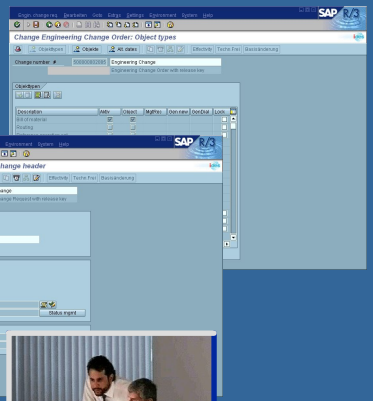
Sales

Quality Management

. . .

Request change
Create Change Request

ECR/ ECO



Change department

Enter objects

Approve Change Request
Convert Change Request to a Change Order

Complete Change Order
Release changes

Product engineering

. . .

Process engineering

Check feasibility

Change objects

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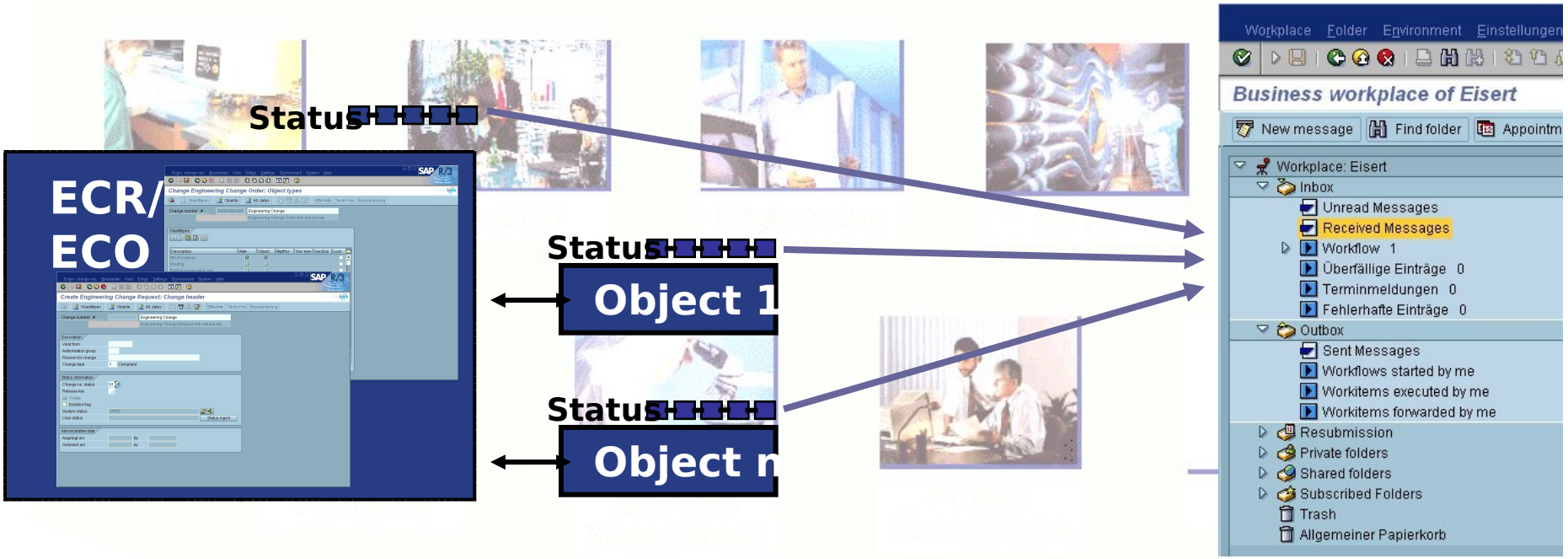
Workflow for ECR/ECO Processing



- **Workflow process is triggered by status changes**
- **Integrated office inbox as communication window**
- **Direct participation of the responsible specialists from all necessary areas of the enterprise**
- **Several templates for ECR/ECO and the linked objects**

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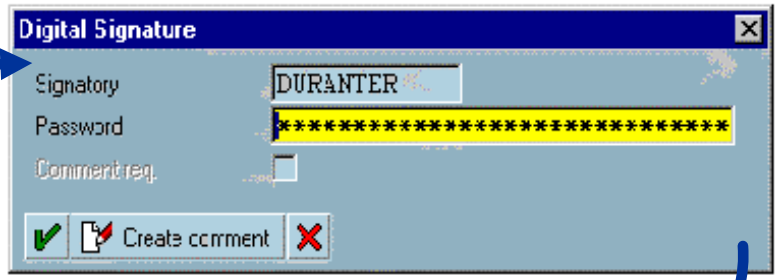
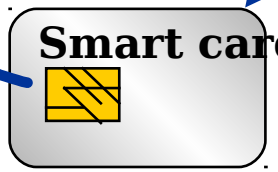
Digital Signature





- **ECR /ECO header and object management record level**
- **Settings in customizing for a particular object status: digital signature - yes/no?**
- **Cross checking (“multiple signature principle”)**

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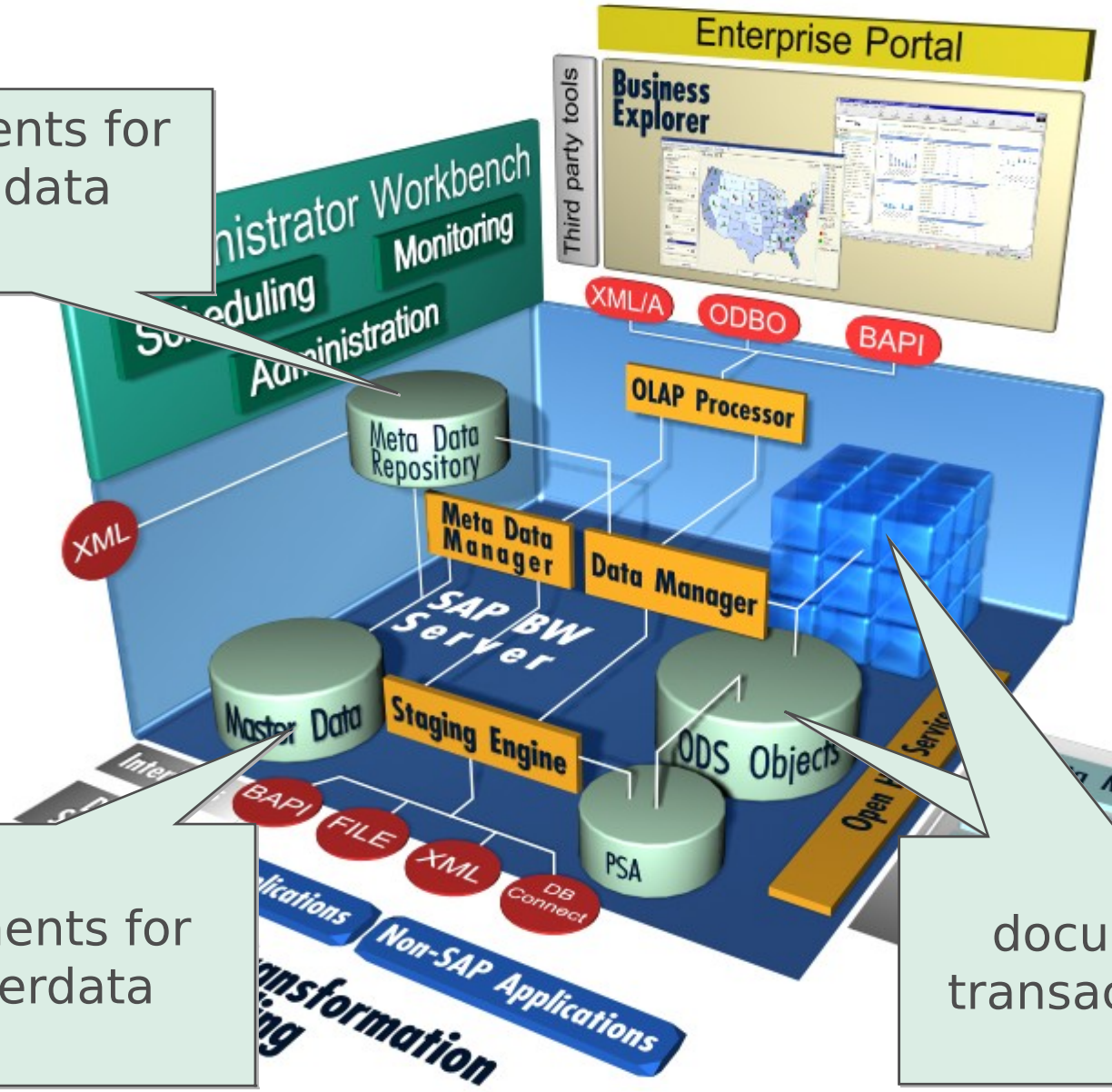
Documents in SAP BW



documents for metadata

documents for masterdata

documents for transactional data

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Mobile Intelligence

Technology

BW Web applications are automatically mobile- enabled

- **Device recognition**
- **Device specific rendering**
- **Device specific navigation**

One tool serves all scenarios

- **BEx Web Application Designer**

Performance

- **Pre-calculated reports / web applications**

Synchronization with PDA

Scenarios

Mobile Reporting

- **Timely decisions with real-time data**
- **Wireless connection, no access to a networked computer**

Offline reporting

- **Portability**
- **Snapshot of data needed for a specific business situation (i.e at the customer site)**

Analytic functionality

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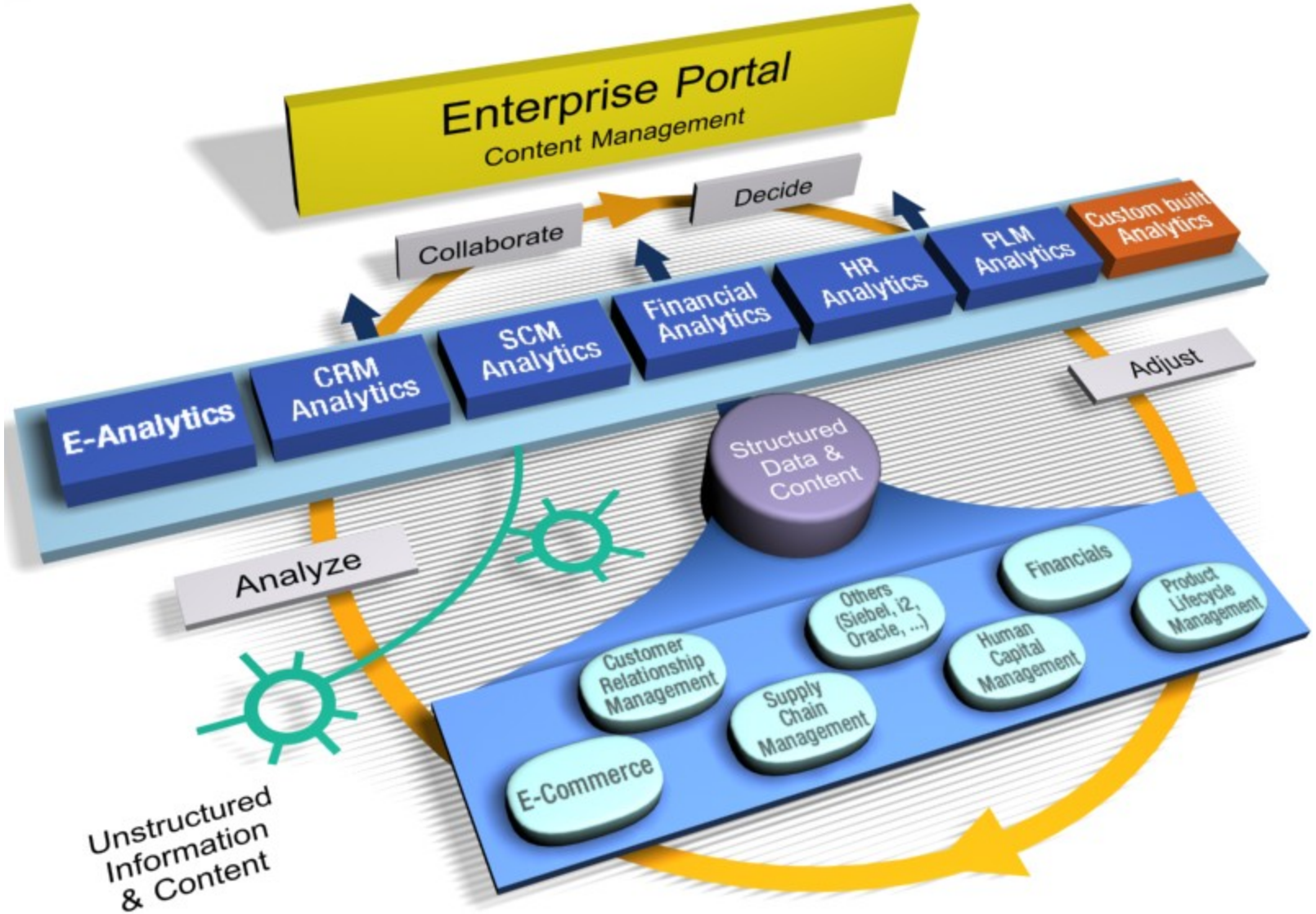
Analytical Applications



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